## WHAT IS CLAIMED IS:

1. A method of reducing the frequency of industrial accidents comprising the steps of:

determining the mental state of an individual at the time of an accident or close call; classifying the cause of the accident as being due to the individual being in one of four hazardous mental states;

identifying the state-to-error risk pattern; and

teaching the individual to effect critical error reduction techniques, to avoid future occurrences of accidents.

2. The method of claim 1, wherein said step of teaching comprises a step selected from the group consisting of:

teaching the individual to "self trigger" on entering a hazardous state before making the error again in the future;

teaching the individual to analyse close calls and small errors, learning from them, to reduce the likelihood of major accidents occurring;

teaching the individual to observing others for patterns which increase risk; or teaching the individual to work on improving their good habits.

3. The method of claim 1, wherein said step of classifying comprises a step selected from the group consisting of:

classifying the individual to be a mental state of "rushing"; classifying the individual to be a mental state of "frustration"; classifying the individual to be a mental state of "fatigue"; or classifying the individual to be a mental state of "complacency".

4. The method of claim 1, wherein said step of identifying comprises a step selected from the group consisting of:

identifying a critical behaviour of "eyes not on task";

identifying a critical behaviour of "mind not on task";

identifying a critical behaviour of "(moving into or being in) the line-of-fire"; or identifying a critical behaviour of "somehow losing your balance, traction or grip".

- The method of claim 1, further comprising the step of: teaching the individual to perform the analysis of claim 1 when they have smaller incidents.
- 6. The method of claim 1, further comprising the step of: instructing the individual to look for state-to-error risk patterns in the actions of others.
- 7. A form for use in accident investigation comprising:
- a first field for entering a description of an accident;
- text identifying the four possible mental states of an individual involved in said accident;
- a second field for identifying the mental state of said individual;
- text identifying the four state-to-error risk patterns; and
- a third field for identifying the state-to-error risk pattern which resulted in the incident occurring; and
- text identifying critical error reduction techniques which might reduce the likelihood of the incident occurring again.
- 8. A method of training individuals to avoid accidents, comprising the steps of: teaching said individual to:
  - determine their own mental state at the time of an accident or close call; classify the cause of said accident as their being in one of four hazardous mental states;
  - identify the state-to-error risk pattern which caused said accident; and effect critical error reduction techniques, to avoid future occurrences of accidents.